

Online Appendix

Corruption, Accountability, and Women's Access to Power

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1. Overview of Variables

Table 1.1: Variable Descriptions

	N	Mean	Standard Deviation	Minimum	Lower SD Bound	Upper SD Bound	Maximum
Female Minister	3323	0.08	0.275	0	-0.19	0.36	1
Δ Corruption	2046	-1.26	6.14	-26.9	-7.39	4.89	27
Log GDP per Cap	3293	8.53	1.50	1.78	7.02	10.03	11.61
Log GDP	3323	24.51	2.16	18.11	22.35	26.67	30.45
Unified	3136	0.49	0.50	0	-0.01	0.99	1
Women in Cab.	3068	15.16	11.49	0	3.68	26.65	62.50
Women in Par.	3206	17.58	10.98	0	6.60	28.56	63.80
Presidential	3312	0.60	0.49	0	0.11	1.09	1
Free & Fair Elections	3312	0.62	0.48	0	0.14	1.11	1
Electoral Democracy (VDEM)	3228	5.16	2.89	0	2.27	8.05	9
Electoral Democracy (FH Accountability)	2138	0.60	0.49	0	0.11	1.09	1

Table 1.1 provides the sample wide variation. Importantly, the number of countries included in the analysis varies over time. This is due primarily to the TI CPI data. In 1995 TI CPI included a sample of 41 countries. This number increased slowly over time. Starting in 2005 it includes over 150 countries. There is also some missingness on the Unified variable, and sparser coverage for the Women in Cabinets measure in 2017. A more detailed discussion of the data variation across time is available in Appendix 10.

Table 1.2: Variable Coding Descriptions

Variable	Variable Source	Coding Description
Increasing Corruption	Transparency International Corruption Perception Index	Increasing corruption is measured by first taking the inverse of CPI. Then we take the difference in the corruption score at time $t-1$ and time $t-6$ such that positive (negative) values indicate the country has seen an increase (decrease) in corruption in the last 5 years. Larger absolute values indicate bigger changes—with positive values indicating increases and negative values indicating decreases—in corruption.
Women Finance Minister	CIA <i>Chiefs of State and Cabinet Members of Foreign Governments</i>	We code the finance ministry as being held by a woman if a woman was recorded as occupying the post for one month or more in a given year.
GDP per Capita	World Bank	Geometric mean of the GDP per capita (constant US dollars)
GDP	World Bank	Geometric mean of the GDP (constant US dollars)
Unified	Database of Political Institutions (Scartascini, Cruz, and Keefer 2018)	Coded as 1 if only one party controls the government. Coded 0 if more than one party has a seat in the government. This was created using the variable gov2me (name of 2nd government party) from DPI. Where there is no second government party, Unified = 1; where there is a second government party, Unified = 0.
Women in Cabinet	Who Governs (Nyrup and Bramwell 2020)	This measure captures the percentage of women in the core executive cabinet. It was created by taking the variable n_female_core (the number of women in the core cabinet) divided by n_core (the number of core cabinet members). When a woman occupies the finance ministry, she is excluded from this measure (i.e., subtracted from both the numerator and denominator).
Women in Parliament (Table 5.2, Fig 5.2)	Hughes, Paxton, Clayton, and Zetterberg (2017) Supplemented by Inter-Parliamentary Union Data	Percent women in the national legislature, lower house.
Presidential	Bjørnskov & Rode (2019) (extension of Cheibub, Gandhi and Vreeland 2010)	Coded 1 if the system is presidential, 0 if the system is not presidential. Semi-presidential systems are coded as 1.
Fair & Free (primary measure of electoral democracy)	Bjørnskov & Rode (2019) (extension of Cheibub, Gandhi and Vreeland 2010)	Coded 1 if elections were held. 0 if there were no elections held.
Electoral Democracy (Table 4.1, Figure 4.1)	Varieties of Democracy	Regimes coded as equal to or above 4 in the v2x_regime_amb variable from VDEM are considered an electoral democracy and coded as a 1. Regimes with a value less than 4 are coded as 0 (not electoral democracies).
Electoral Democracy (Table 4.2, Figure 4.2)	Freedom House	Regimes are coded as an electoral democracy if they score at least 7/12 on the political rights subcategory A (questions about the Electoral Process) and an overall political rights score of 20 or better (out of 40).

2. Model with Alternative Dependent Variable: Transition to Female Finance Minister

As we note in the main text, our outcome variable captures whether a woman holds the finance portfolio. We focus on this measure because ministers do not serve for fixed terms; they can be replaced by the executive at any point. Chief executives are thus continually reevaluating the composition of their cabinets. Indeed, a considerable body of research shows that executives across all regime types regularly weigh the cost of cabinet reshuffles with the potential benefits of enhancing government performance, bolstering their own popular support, or improving their own political fortunes (see, Camerlo and Pérez-Liñán 2015; Quiroz Flores and Smith 2011; Kroeger 2018; Indridason and Kam 2008). Just as a cabinet reshuffle in the wake of a corruption shock likely indicates a calculated response to the crisis, the decision not to reshuffle in the wake of a scandal also reflects a strategic calculation to stay the course (Camerlo and Pérez-Liñán 2015). We thus expect that as long as women appointees signal a commitment to addressing corruption, we are more likely to observe a woman in this position.

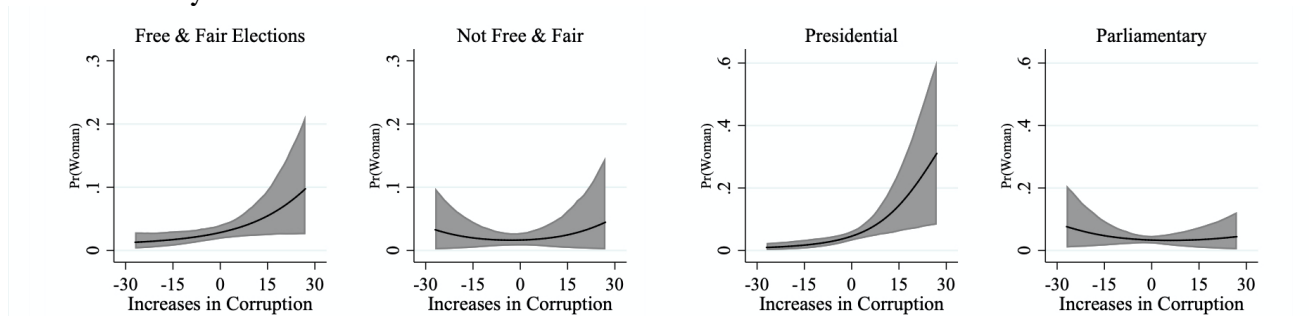
At the same time, it is important to establish that our results are robust to considering women's appointment to the finance ministry. We thus fit additional models where our dependent variable is the appointment of a woman finance minister. In this model specification the dependent variable is coded 1 when a woman is appointed to the post, and a zero when the post is held by a man. After a woman is appointed to a post, all other subsequent country-years in which the woman holds office drop out of the analysis. The country returns to the analysis when the post is once again occupied by a man. The results for this analysis are presented in Appendix Table 2 and Figure 2. Consistent with the findings presented in the main text, we find that women are more likely to be appointed by presidents in the context of free and fair elections. These results do not hold for prime ministers, or for states without free and fair elections.

Table 2: Corruption and the Transition to a Woman Finance Minister

	(1) Full Sample	(2) Free & Fair Elections	(3) Not Free & Fair	(4) Corruption* Free&Fair	(5) Presidential	(6) Parliamentary	(7) Corruption* Presidential
Δ Corruption	0.042 (0.026)	0.049* (0.029)	0.055 (0.063)	0.019 (0.056)	0.097** (0.041)	-0.016 (0.051)	-0.009 (0.046)
Time	0.000 (0.037)	0.010 (0.039)	-0.089 (0.112)	-0.000 (0.037)	0.025 (0.052)	0.000 (0.067)	0.020 (0.040)
Log GDP per Cap	-0.327** (0.141)	-0.261* (0.150)	-0.840* (0.490)	-0.326** (0.141)	-0.389** (0.191)	-0.092 (0.410)	-0.269* (0.151)
Log GDP	-0.039 (0.104)	-0.061 (0.109)	0.345 (0.324)	-0.039 (0.104)	0.135 (0.144)	-0.537** (0.248)	-0.044 (0.108)
Unified	-0.861** (0.343)	-0.915** (0.395)	-1.060 (0.790)	-0.859** (0.343)	-1.566*** (0.558)	0.682 (0.653)	-0.895** (0.397)
% ♀ in Cabinet	0.048*** (0.013)	0.039*** (0.014)	0.142** (0.059)	0.047*** (0.013)	0.006 (0.018)	0.121*** (0.029)	0.039*** (0.014)
Presidential	0.200 (0.361)	0.123 (0.376)		0.206 (0.361)			0.136 (0.381)
Free&Fair	0.773* (0.434)			0.802* (0.442)			
Δ Corr*Free&Fair				0.028 (0.063)			
Δ Corr*Presidential							0.095 (0.059)
Constant	-1.116 (2.508)	-0.311 (2.655)	-5.893 (7.828)	-1.129 (2.511)	-3.466 (3.344)	7.613 (5.475)	-0.932 (2.670)
Observations	1709	1182	527	1709	647	535	1182

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure 2: Predicted Probability of a Transition to a Woman Finance Minister: Conditional on Accountability



Note: Figures in left panel based on Model 4; figures in right panel based on Model 7. Shaded area represents 84% confidence intervals. When the 84% confidence intervals do not overlap the predicted probabilities are statistically different at a $p < .05$ level (Julious 2004).

3. Models with Alternative Measures of Corruption

Here we consider whether our results are robust to alternative lag structures for the explanatory variable.

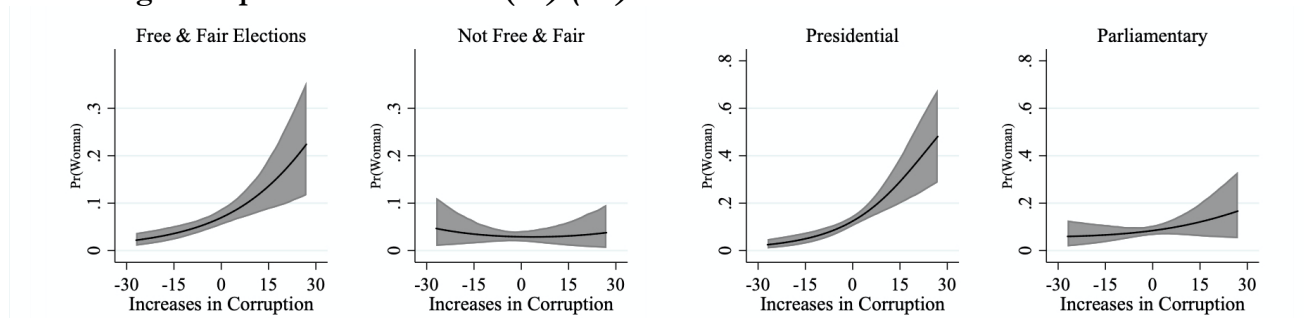
Table 3.1: Corruption and Women's Inclusion in the Finance Ministry
Increasing Corruption measured as: $(t-1)-(t-5)$

	(1) Full Sample	(2) Free & Fair Elections	(3) Not Free & Fair	(4) Corruption* Free&Fair	(5) Presidential	(6) Parliamentary	(7) Corruption* Presidential
Δ Corruption	0.036** (0.015)	0.051*** (0.017)	0.031 (0.036)	-0.003 (0.033)	0.071*** (0.022)	0.022 (0.034)	0.019 (0.028)
Time	0.052*** (0.020)	0.059*** (0.022)	-0.070 (0.059)	0.053*** (0.020)	0.053** (0.027)	0.082** (0.041)	0.064*** (0.022)
Log GDP per Cap	-0.150* (0.080)	-0.150* (0.086)	0.048 (0.217)	-0.151* (0.080)	-0.198** (0.098)	-0.120 (0.242)	-0.150* (0.086)
Log GDP	-0.117** (0.054)	-0.159*** (0.058)	0.351** (0.137)	-0.116** (0.054)	-0.044 (0.069)	-0.446*** (0.135)	-0.152*** (0.058)
Unified	0.001 (0.168)	-0.247 (0.190)	1.061** (0.530)	0.001 (0.168)	-0.591*** (0.226)	0.846** (0.402)	-0.232 (0.190)
% ♀ in Cabinet	0.052*** (0.007)	0.044*** (0.007)	0.186*** (0.032)	0.051*** (0.007)	0.017* (0.009)	0.113*** (0.017)	0.044*** (0.007)
Presidential	0.565*** (0.200)	0.400* (0.207)		0.568*** (0.200)			0.419** (0.208)
Free&Fair	0.826*** (0.225)			0.895*** (0.234)			
Δ Corr*Free&Fair				0.050 (0.037)			
Δ Corr*Presidential							0.050 (0.035)
Constant	-1.325 (1.263)	0.786 (1.376)	-13.866*** (117.458)	-1.392 (1.266)	-0.312 (1.602)	4.892 (3.007)	0.506 (1.387)
Observations	1994	1381	613	1994	775	606	1381

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure 3.1: Predicted Probability of Women's Inclusion in the Finance Ministry: Conditional on Accountability

Increasing Corruption measured as: $(t-1)-(t-5)$



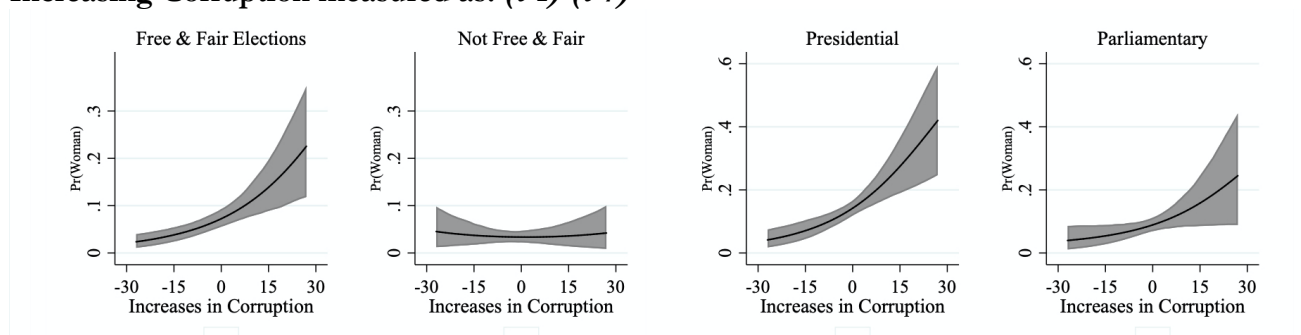
Note: Figures in left panel based on Model 4; figures in right panel based on Model 7. Shaded area represents 84% confidence intervals. When the 84% confidence intervals do not overlap the predicted probabilities are statistically different at a $p < .05$ level (Julious 2004).

Table 3.2: Corruption and Women's Inclusion in the Finance Ministry
Increasing Corruption measured as: (t-1)-(t-7)

	(1) Full Sample	(2) Free & Fair Elections	(3) Not Free & Fair	(4) Corruption* Free&Fair	(5) Presidential	(6) Parliamentary	(7) Corruption* Presidential
Δ Corruption	0.031** (0.013)	0.050*** (0.016)	0.023 (0.025)	-0.004 (0.039)	0.057*** (0.019)	0.040 (0.033)	0.041 (0.028)
Time	0.038 (0.023)	0.043* (0.025)	-0.060 (0.071)	0.039* (0.023)	0.096 (0.030)	0.094* (0.050)	0.045* (0.025)
Log GDP per Cap	-0.158* (0.086)	-0.145 (0.091)	-0.028 (0.249)	-0.162* (0.086)	-0.193* (0.104)	-0.029 (0.264)	-0.146 (0.091)
Log GDP	-0.090 (0.058)	-0.132** (0.062)	0.375** (0.156)	-0.091 (0.058)	-0.032 (0.074)	-0.479*** (0.151)	-0.129** (0.062)
Unified	-0.106 (0.179)	-0.370* (0.205)	0.797 (0.547)	-0.109 (0.180)	-0.665*** (0.240)	0.700 (0.440)	-0.364* (0.205)
% ♀ in Cabinet	0.051*** (0.007)	0.041*** (0.008)	0.188*** (0.035)	0.049*** (0.007)	0.013 (0.010)	0.115*** (0.018)	0.041*** (0.008)
Presidential	0.640*** (0.213)	0.497** (0.221)		0.634*** (0.214)			0.498** (0.221)
Free&Fair	0.706*** (0.242)			0.786*** (0.251)			
Δ Corr*Free&Fair				0.050 (0.031)			
Δ Corr*Presidential							0.013 (0.033)
Constant	-1.452 (1.417)	0.511 (1.542)	-13.905*** (4.045)	-1.454 (1.425)	0.250 (1.809)	4.476 (3.461)	0.420 (1.559)
Observations	1683	1191	492	1683	665	526	1191

Standard errors in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure 3.2: Predicted Probability of Women's Inclusion in the Finance Ministry: Conditional on Accountability
Increasing Corruption measured as: (t-1)-(t-7)



Note: Figures in left panel based on Model 4; figures in right panel based on Model 7. Shaded area represents 84% confidence intervals. When the 84% confidence intervals do not overlap the predicted probabilities are statistically different at a $p < .05$ level (Julious 2004).

3.3 Discussion of Sustained Corruption and Models with ($t-1$) Lag Specification

The main way citizens learn about corruption is through news media, opposition parties, or their own experience with paying bribes (Davis, Camp, and Colman 2004; Lupu 2017; Kunicová and Rose-Ackerman 2005). We reason that in countries where corruption is perpetually high, it is less likely to demand the attention of headline news, to motivate opposition campaigns, or to capture the attention of citizens. Indeed, Hiskey and Moseley (2020) show that where political machines have retained hold over governments at the sub-national level in Argentina and Mexico, people do not consider their clientelistic tactics to be corruption. Media and opposition parties may thus be less likely to center their attention on bringing corruption to light, and citizens may be more likely to see corruption as business as usual or simply “turn a blind eye” (Anduiza, Gallego, and Muñoz 2013). If so, leaders have fewer incentives to address sustained high levels of corruption, as any individual head of government (or governing party) is less likely to be held accountable for long-term trends. Again, drawing on Hiskey and Moseley (2020), those “business as usual” corrupt practices may be very important for keeping the incumbent party in power.

By contrast, a meaningful jump in corruption may be cause for concern (even, or indeed especially, if the overall level remains comparatively low). It is more likely to draw media attention, more likely to motivate political opponents, and more likely to frustrate citizens. And, when corruption is seen as increasing, the governing party is an easier target for blame. It is in these cases where we expect heads of government to use women finance ministers to signal cleanliness.

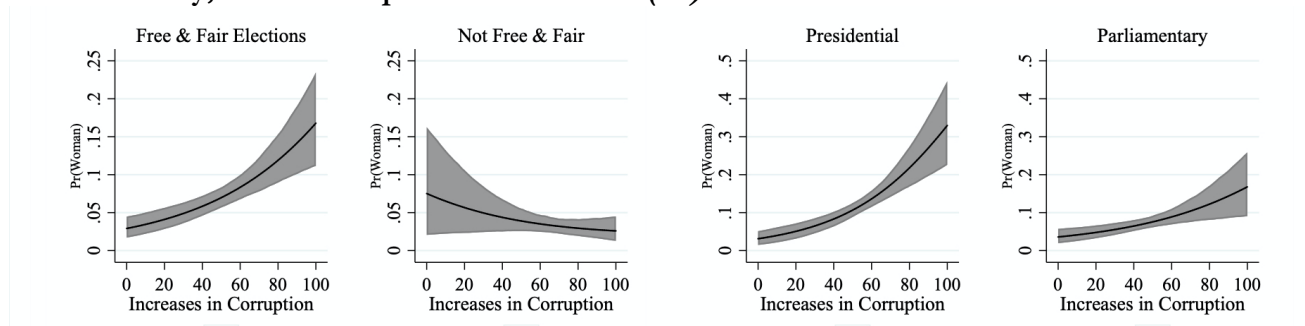
For this reason, the models in our main analysis measure increases in corruption. Nonetheless, we demonstrate that our results are largely robust to an alternative approach to measuring our main explanatory variable that focuses on sustained high levels of corruption. In this section, we fit a series of models where we measure the level of corruption using the (inverse) of the Transparency International score in the previous year (i.e., corruption is measured at $t-1$). We find that women are more likely to be appointed to the finance ministry in the context of high corruption. Moreover, this relationship is stronger in the context of free and fair elections and presidential systems. These results are reported in Table 3.3 and Figure 3.3 below.

Table 3.3: Level of Corruption and Women's Inclusion in the Finance Ministry
Level of Corruption measured as: (*t-1*)

	(1) Full Sample	(2) Free & Fair Elections	(3) Not Free & Fair	(4) Corruption* Free&Fair	(5) Presidential	(6) Parliamentary	(7) Corruption* Presidential
Corruption _{t-1}	0.02*** (0.01)	0.03*** (0.01)	-0.01 (0.01)	-0.01 (0.01)	0.03*** (0.01)	0.03** (0.01)	0.03*** (0.01)
Time	0.03* (0.01)	0.03** (0.02)	-0.04 (0.04)	0.03* (0.01)	0.03 (0.02)	0.05* (0.03)	0.04** (0.02)
Log GDP per Cap	0.07 (0.09)	0.17 (0.11)	-0.01 (0.20)	0.09 (0.09)	0.15 (0.13)	-0.03 (0.25)	0.18 (0.11)
Log GDP	-0.15** (0.05)	-0.21*** (0.05)	0.21* (0.11)	-0.15*** (0.05)	-0.13** (0.06)	-0.31*** (0.11)	-0.21*** (0.05)
Unified	-0.03 (0.15)	-0.29* (0.17)	0.71* (0.39)	-0.08 (0.15)	-0.62*** (0.21)	0.50 (0.34)	-0.28* (0.17)
% ♀ in Cabinet	0.06*** (0.01)	0.06*** (0.01)	0.12*** (0.02)	0.07*** (0.01)	0.04*** (0.01)	0.11*** (0.02)	0.06*** (0.01)
Presidential	0.35* (0.18)	0.26 (0.19)		0.40** (0.18)			-0.11 (0.46)
Free&Fair	0.83*** (0.19)			-2.07** (0.83)			
Corr*Free&Fair				0.04*** (0.01)			
Corr*Presidential							0.01 (0.01)
Constant	-3.17** (1.28)	-2.12 (1.45)	-8.89*** (3.15)	-0.74 (1.43)	-2.93* (1.66)	0.32 (3.06)	-1.91 (1.46)
Observations	2625	1755	870	2625	989	766	1755

Standard errors in parentheses * p<0.10, ** p<0.05, *** p<0.01

Figure 3.3: Predicted Probability of Women's Inclusion in the Finance Ministry: Conditional on Accountability, Level Corruption measured as: (*t-1*)



Note: Figures in left panel based on Model 4; figures in right panel based on Model 7. Shaded area represents 84% confidence intervals. When the 84% confidence intervals do not overlap the predicted probabilities are statistically different at a p<.05 level (Julious 2004).

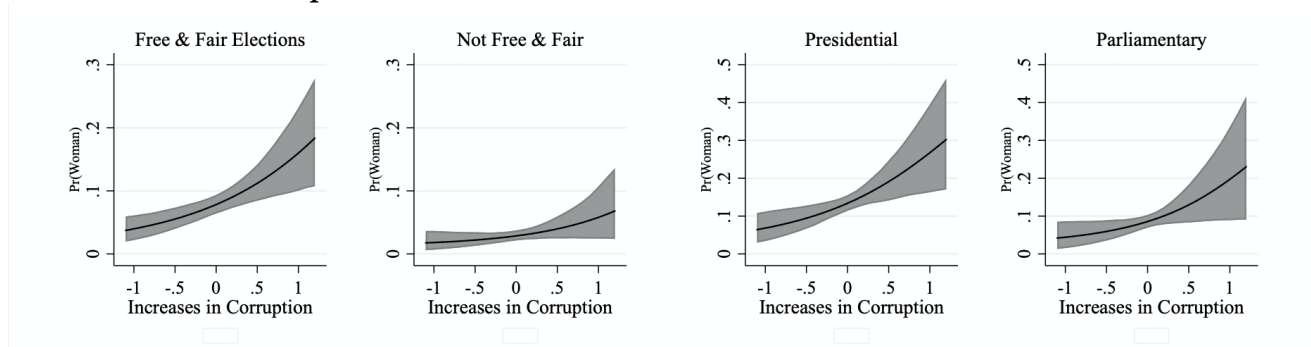
We also replicate our main results using the World Bank Control of Corruption measure.

Table 3.4: Replication of Main Analysis Using World Bank Control of Corruption Measure

	(1) Full Sample	(2) Free & Fair Elections	(3) Not Free & Fair	(4) Corruption* Free&Fair	(5) Presidential	(6) Parliamentary	(7) Corruption* Presidential
Δ Corruption	0.67** (0.31)	0.90** (0.38)	0.53 (0.55)	0.36 (0.54)	1.07** (0.44)	0.94 (0.81)	0.64 (0.72)
Time	0.02 (0.02)	0.04** (0.02)	-0.11*** (0.04)	0.02 (0.02)	0.03 (0.02)	0.08** (0.04)	0.04** (0.02)
Log GDP per Cap	-0.14** (0.07)	-0.15* (0.08)	-0.00 (0.15)	-0.14** (0.07)	-0.17* (0.09)	-0.39* (0.20)	-0.15* (0.08)
Log GDP	-0.09* (0.05)	-0.14*** (0.05)	0.25** (0.10)	-0.09* (0.05)	-0.04 (0.06)	-0.16* (0.09)	-0.14*** (0.05)
Unified	-0.02 (0.15)	-0.30* (0.18)	0.64* (0.37)	-0.02 (0.15)	-0.68*** (0.22)	0.54 (0.37)	-0.30* (0.18)
% ♀ in Cabinet	0.05*** (0.01)	0.05*** (0.01)	0.13*** (0.02)	0.05*** (0.01)	0.03*** (0.01)	0.10*** (0.01)	0.05*** (0.01)
Presidential	0.52*** (0.18)	0.43** (0.20)		0.52*** (0.18)			0.42** (0.20)
Free&Fair	0.68*** (0.19)			0.66*** (0.19)			
Δ Corr*Free&Fair				0.47 (0.65)			
Δ Corr*Presidential							0.36 (0.84)
Constant	-1.27 (0.98)	0.52 (1.12)	-8.66*** (2.28)	-1.22 (0.99)	-0.26 (1.32)	0.64 (2.19)	0.51 (1.12)
Observations	2416	1501	915	2416	860	641	1501

Standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01

Figure 3.4: Predicted Probability of Women’s Inclusion in the Finance Ministry: Using World Bank Control of Corruption Measure



Note: Figures in left panel based on Model 4; figures in right panel based on Model 7. Shaded area represents 84% confidence intervals. When the 84% confidence intervals do not overlap the predicted probabilities are statistically different at a p<.05 level (Julious 2004).

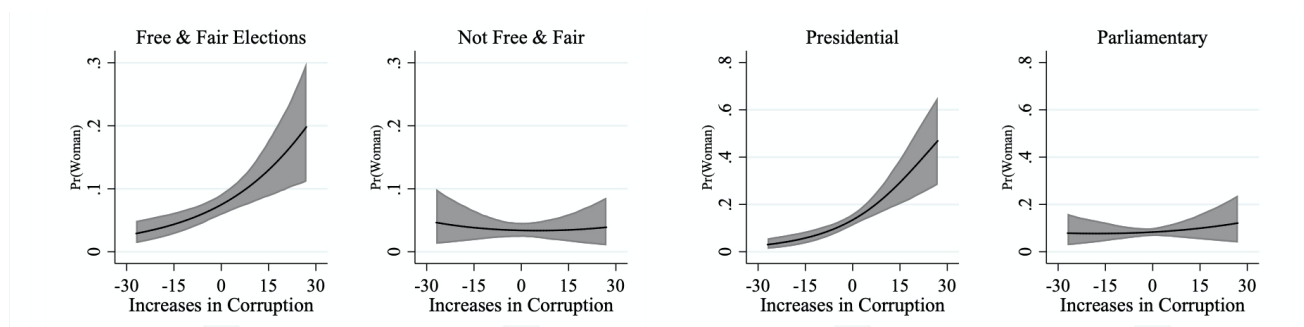
4. Models with Alternative Measures of Electoral Democracy

Table 4.1: Corruption and Women's Inclusion in the Finance Ministry, Electoral Democracy measured using VDEM

	(1) Full Sample	(2) Electoral Democracy	(3) Not Electoral Democracy	(4) Corruption* Electoral	(5) Presidential	(6) Parliamentary	(7) Corruption* Presidential
Δ Corruption	0.04** (0.01)	0.05*** (0.02)	0.00 (0.03)	-0.00 (0.03)	0.07*** (0.02)	0.01 (0.03)	0.02 (0.03)
Time	0.05** (0.02)	0.06** (0.02)	-0.02 (0.05)	0.05** (0.02)	0.05* (0.03)	0.08* (0.04)	0.06*** (0.02)
Log GDP per Cap	-0.11 (0.08)	-0.08 (0.09)	-0.37* (0.20)	-0.12 (0.08)	-0.12 (0.10)	0.03 (0.25)	-0.08 (0.09)
Log GDP	-0.11* (0.06)	-0.17*** (0.06)	0.31** (0.14)	-0.11* (0.06)	-0.06 (0.07)	-0.45*** (0.14)	-0.16*** (0.06)
Unified	-0.09 (0.17)	-0.18 (0.20)	-0.08 (0.38)	-0.09 (0.17)	-0.51** (0.24)	0.83** (0.41)	-0.16 (0.20)
% ♀ in Cabinet	0.05*** (0.01)	0.05*** (0.01)	0.12*** (0.02)	0.05*** (0.01)	0.02 (0.01)	0.11*** (0.02)	0.05*** (0.01)
Presidential	0.59*** (0.21)	0.41* (0.22)		0.59*** (0.21)			0.43** (0.22)
Electoral Dem	0.47** (0.22)			0.53** (0.22)			
Δ Corr*Electoral				0.05 (0.03)			
Δ Corr*Presidential							0.05 (0.03)
Constant	-1.48 (1.34)	0.41 (1.50)	-8.66*** (3.20)	-1.47 (1.35)	-0.65 (1.76)	3.71 (3.15)	0.06 (1.51)
Observations	1837	1261	576	1837	697	564	1261

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure 4.1: Predicted Probability of Women's Inclusion in the Finance Ministry: Conditional on Accountability, Electoral Democracy measured using VDEM



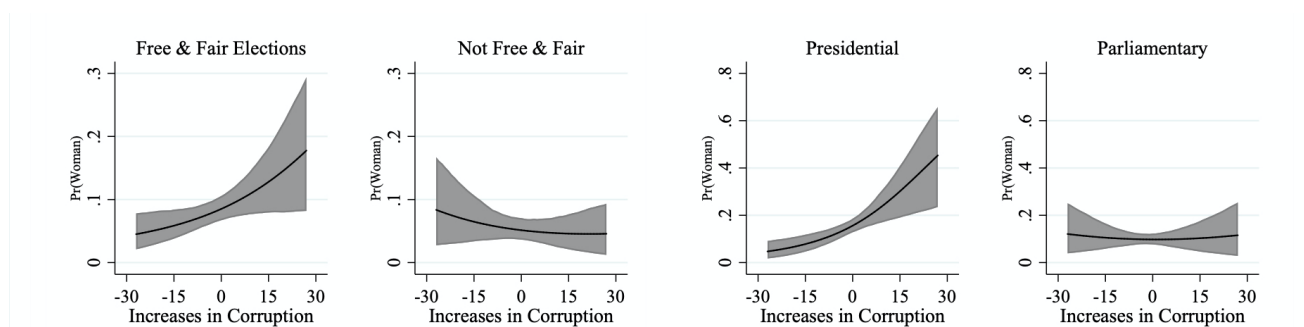
Note: Figures in left panel based on Model 4; figures in right panel based on Model 7. Shaded area represents 84% confidence intervals. When the 84% confidence intervals do not overlap the predicted probabilities are statistically different at a $p < .05$ level (Julious 2004).

Table 4.2: Corruption and Women’s Inclusion in the Finance Ministry, Electoral Democracy measured using Freedom House

	(1) Full Sample	(2) Electoral Democracy	(3) Not Electoral Democracy	(4) Corruption* Electoral	(5) Presidential	(6) Parliamentary	(7) Corruption* Presidential
Δ Corruption	0.02 (0.02)	0.03* (0.02)	-0.01 (0.03)	-0.00 (0.03)	0.06** (0.03)	-0.01 (0.04)	0.01 (0.03)
Time	0.01 (0.03)	0.03 (0.03)	-0.08 (0.06)	0.01 (0.03)	-0.00 (0.04)	0.07 (0.06)	0.04 (0.03)
Log GDP per Cap	-0.05 (0.09)	-0.00 (0.10)	-0.35* (0.18)	-0.06 (0.09)	-0.03 (0.12)	0.02 (0.29)	-0.01 (0.10)
Log GDP	-0.12** (0.06)	-0.21*** (0.07)	0.18 (0.12)	-0.12** (0.06)	-0.09 (0.08)	-0.46*** (0.16)	-0.20*** (0.07)
Unified	-0.16 (0.18)	-0.43* (0.24)	0.32 (0.34)	-0.16 (0.18)	-0.84*** (0.29)	0.60 (0.47)	-0.41* (0.24)
% ♀ in Cabinet	0.06*** (0.01)	0.05*** (0.01)	0.09*** (0.02)	0.06*** (0.01)	0.02 (0.01)	0.13*** (0.02)	0.05*** (0.01)
Presidential	0.50** (0.22)	0.39 (0.24)		0.50** (0.22)			0.42* (0.24)
Electoral Dem	0.04 (0.22)			0.11 (0.23)			
Δ Corr*Electoral				0.03 (0.03)			
Δ Corr*Presidential							0.05 (0.04)
Constant	-0.48 (1.48)	1.10 (1.72)	-3.71 (2.97)	-0.44 (1.48)	0.76 (2.02)	3.53 (3.72)	0.74 (1.75)
Observations	1519	970	549	1519	533	437	970

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure 4.2: Predicted Probability of Women’s Inclusion in the Finance Ministry: Conditional on Accountability, Electoral Democracy measured using Freedom House



Note: Figures in left panel based on Model 4; figures in right panel based on Model 7. Shaded area represents 84% confidence intervals. When the 84% confidence intervals do not overlap the predicted probabilities are statistically different at a $p < .05$ level (Julious 2004).

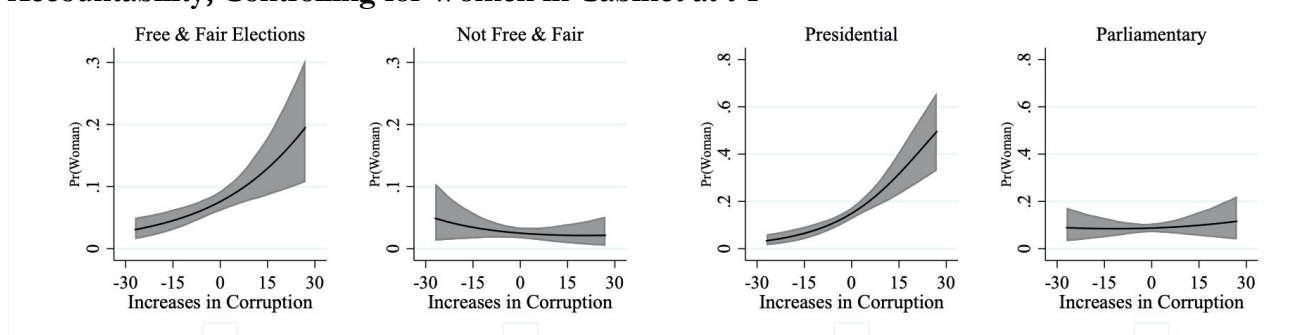
5. Models with Alternative Specifications of Women in Politics

Table 5.1: Corruption and Women's Inclusion in the Finance Ministry, Controlling for Women in Cabinet at $t-1$

	(1) Full Sample	(2) Free & Fair Elections	(3) Not Free & Fair	(4) Corruption* Free&Fair	(5) Presidential	(6) Parliamentary	(7) Corruption* Presidential
Δ Corruption	0.03** (0.01)	0.04*** (0.02)	0.00 (0.03)	-0.01 (0.03)	0.07*** (0.02)	0.02 (0.03)	0.01 (0.03)
Time	0.04** (0.02)	0.05** (0.02)	-0.09 (0.06)	0.04** (0.02)	0.05* (0.03)	0.09** (0.04)	0.06*** (0.02)
Log GDP per Cap	-0.16** (0.08)	-0.15* (0.09)	-0.02 (0.23)	-0.17** (0.08)	-0.19* (0.10)	-0.16 (0.24)	-0.15* (0.09)
Log GDP	-0.09* (0.05)	-0.13** (0.06)	0.34** (0.14)	-0.09* (0.05)	-0.01 (0.07)	-0.45*** (0.14)	-0.12** (0.06)
Unified	-0.12 (0.17)	-0.35* (0.19)	0.74 (0.50)	-0.11 (0.17)	-0.62*** (0.23)	0.69* (0.41)	-0.33* (0.19)
% ♀ in Cabinet _{t-1}	0.05*** (0.01)	0.04*** (0.01)	0.18*** (0.03)	0.05*** (0.01)	0.01 (0.01)	0.12*** (0.02)	0.04*** (0.01)
Presidential	0.49** (0.20)	0.36* (0.21)		0.50** (0.20)			0.39* (0.21)
Electoral Dem	0.87*** (0.23)			0.97*** (0.24)			
Δ Corr*Electoral				0.05 (0.03)			
Δ Corr*Presidential							0.05* (0.03)
Constant	-1.49 (1.30)	0.40 (1.40)	-12.02*** (3.49)	-1.59 (1.30)	-1.06 (1.64)	5.07 (3.15)	0.01 (1.42)
Observations	1945	1344	601	1945	760	584	1344

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure 5.1: Predicted Probability of Women's Inclusion in the Finance Ministry: Conditional on Accountability, Controlling for Women in Cabinet at $t-1$



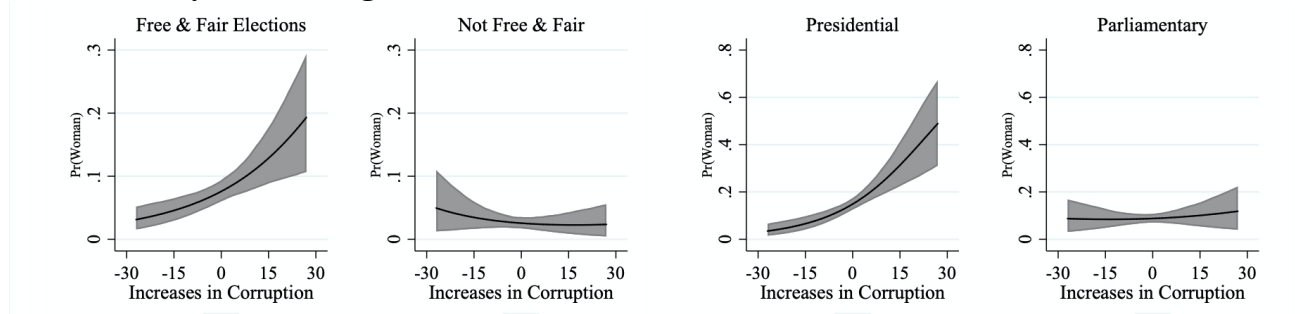
Note: Figures in left panel based on Model 4; figures in right panel based on Model 7. Shaded area represents 84% confidence intervals. When the 84% confidence intervals do not overlap the predicted probabilities are statistically different at a $p < .05$ level (Julius 2004).

Table 5.2: Corruption and Women's Inclusion in the Finance Ministry, Controlling for Women in Parliament at $t-1$

	(1) Full Sample	(2) Free & Fair Elections	(3) Not Free & Fair	(4) Corruption* Free&Fair	(5) Presidential	(6) Parliamentary	(7) Corruption* Presidential
Δ Corruption	0.03** (0.01)	0.04*** (0.02)	-0.00 (0.03)	-0.01 (0.03)	0.06*** (0.02)	-0.00 (0.03)	0.01 (0.02)
Time	0.04* (0.02)	0.05** (0.02)	0.00 (0.05)	0.04** (0.02)	0.04 (0.03)	0.11*** (0.04)	0.06*** (0.02)
Log GDP per Cap	-0.08 (0.08)	-0.04 (0.09)	-0.25 (0.21)	-0.08 (0.08)	-0.16 (0.11)	0.18 (0.19)	-0.04 (0.09)
Log GDP	-0.11** (0.06)	-0.14** (0.06)	-0.02 (0.15)	-0.11** (0.06)	-0.02 (0.07)	-0.43*** (0.12)	-0.13** (0.06)
Unified	-0.09 (0.17)	-0.33* (0.19)	1.14** (0.49)	-0.08 (0.17)	-0.61*** (0.23)	0.62 (0.38)	-0.32* (0.19)
% ♀ in Parliament	0.04*** (0.01)	0.03*** (0.01)	0.07*** (0.02)	0.04*** (0.01)	0.02* (0.01)	0.10*** (0.02)	0.03*** (0.01)
Presidential	0.65*** (0.19)	0.54*** (0.20)		0.65*** (0.19)			0.57*** (0.20)
Free&Fair	1.12*** (0.23)			1.20*** (0.24)			
Δ Corr*Free&Fair				0.05 (0.03)			
Δ Corr*Presidential							0.06* (0.03)
Constant	-1.91 (1.31)	-0.29 (1.39)	-2.87 (3.45)	-2.00 (1.32)	-0.95 (1.69)	1.70 (2.79)	-0.69 (1.41)
Observations	1934	1335	599	1934	746	589	1335

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure 5.2: Predicted Probability of Women's Inclusion in the Finance Ministry: Conditional on Accountability, Controlling for Women in Parliament at $t-1$



Note: Figures in left panel based on Model 4; figures in right panel based on Model 7. Shaded area represents 84% confidence intervals. When the 84% confidence intervals do not overlap the predicted probabilities are statistically different at a $p < .05$ level (Julious 2004).

6. Model with Alternative Measure of Clarity of Responsibility

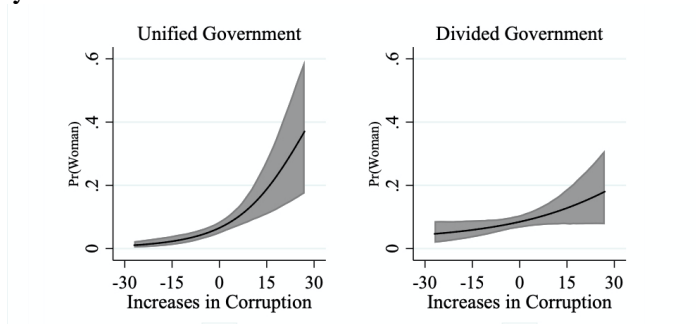
Table 6: Corruption and Women's Inclusion in the Finance Ministry: Conditional on Clarity of Responsibility

	(1) Unified Government	(2) Divided Government	(3) Corruption* Unified Government
Δ Corruption	0.052** (0.026)	0.029 (0.022)	0.029 (0.021)
Time	-0.031 (0.042)	0.100*** (0.029)	0.059** (0.023)
Log GDP per Cap	-0.256 (0.187)	-0.102 (0.101)	-0.120 (0.088)
Log GDP	-0.141 (0.102)	-0.127* (0.076)	-0.153** (0.060)
% ♀ in Cabinet	0.041*** (0.013)	0.049*** (0.010)	0.043*** (0.008)
Presidential	-0.457 (0.373)	0.873*** (0.268)	0.442** (0.214)
Unified			-0.288 (0.199)
Δ Corr*Unified			0.050 (0.032)
Constant	3.70 (2.27)	-1.87 (1.92)	0.39 (1.45)
Observations	501	786	1287

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Models 1-3 use “unified” as the measure of clarity of responsibility.

Figure 6: Predicted Probability of Women’s Inclusion in the Finance Ministry: Conditional on Clarity of Responsibility



Note: Figures based on Model 3. Shaded area represents 84% confidence intervals. When the 84% confidence intervals do not overlap the predicted probabilities are statistically different at a $p < .05$ level (Julious 2004).

7. Women as Political Insiders and Outsiders

We examined the backgrounds of women finance ministers appointed in the context of increasing corruption. We first identified women serving in environments with dramatically increasing corruption—i.e., the 17 women who occupied the post when the change in corruption measure was at least one standard deviation above the sample mean. Following the strict coding rules established by Escobar-Lemmon and Taylor-Robinson (2016, 106) we coded the backgrounds of each of these women ministers. Specifically, Escobar-Lemmon and Taylor-Robinson coded cabinet ministers as “political insiders – ministers who had previously held a cabinet post, been a vice minister, or built a career in national government.” Insiders are politicians whose experience in national government means that they should already know and be known to the people who are players in the government (106, n1), though not all people who meet these criteria will be known by the public.

According to Escobar-Lemmon and Taylor-Robinson’s definition, seven of the women ministers in our sample who served in the context of increasing corruption were political outsiders, while ten were insiders (see Appendix Table 7). Of these “insider” women, only four had previously been ministers holding other portfolios. Another four had been under-secretaries (or held a similar post), and two had built careers in government. The seven “outsiders” had careers in academia, the private sector, outside of the country, in local-level politics, or in the bureaucracy.

Importantly, we observe that the *ratio of political outsiders is higher in countries with free and fair elections and presidential systems than it is in other types of states*. Indeed, over half of the women appointed in free and fair (semi-)presidential systems are outsiders. This is notable because our theoretical framework suggests that heads of government are most likely to use women as symbols when they are more likely to be held accountable for economic conditions.

The variation in women’s backgrounds before they ascend to the helm of the finance ministry further underscores that women’s outsider status is not the only factor that makes women attractive symbols of cleanliness during times of increasing corruption. Perceptions of women as more cautious and more trustworthy also motivate their strategic inclusion as anti-corruption signals.

Table 7: Coding of Female Finance Ministers' Prior Careers: Insiders or Outsiders

Country	Year	Free & Fair (Semi)Presidential Systems	Minister(s)
Argentina	2005	✓	Felisa Miceli: Outsider (financial economic analysis, consultant) took over from Roberto Lavagna
Austria	2011		Maria Fekter: Insider (previous post as Min. of Interior) took over from Josef Proell
Guatemala	2004	✓	Maria Antonieta del Cid: Outsider (work abroad, banker) took over from Eduardo Weymann
Iceland	2012	✓	Oddny G. Hardardottir: Outsider (provincial politics) took over from Steingrímur J. Sigfússon
Lebanon	2011		Raya Haffar: Insider (previous 5 years as member of the Office of the PM and prior work as advisor to Min. of Economy & Trade) took over from Mohammed Chattah
Mozambique	2004		Luisa Diogo: Insider (prior Deputy Minister of Finance) took over from Tomas Salomao
Namibia	2004-2007	✓	Saara Kuugongelwa: Insider (previous Director General of the National Planning Commission, a post with the rank of minister) took over from Nangolo Mbumba
Nigeria	2004	✓	Ngozi Okonjo-Iweala: Outsider (career at World Bank) took over from Malam Adamu Ciroma. NOTE: insider when reappointed Min. of Finance (2011-2015)
Norway	2009		Kristin Halvorsen: Insider (15 years in parliament and leader of the Socialist Left Party) took over from Per-Kristian Foss
Philippines	2004	✓	Juanita Amatong: Insider (prior under-secretary of Dept. of Finance) took over from Jose Camacho
Poland	2005		Teresa Lubinska: Outsider (academic) took over from Miroslaw Gronicki
Spain	2010		Elena Salgado Mendez: Insider (prior Min. of Economy and Min. of Health and Deputy PM) took over from Pedro Solbes
Suriname	2010	✓	Wonnie Boedhoe: Outsider (career in bureaucracy) took over from Humphrey S. Hildenberg
Sweden	2017		Magdalena Andersson: Insider (State Secretary in Min of Finance, Deputy Director Swedish Tax Agency, economic policy spokesperson for Swedish Social Democratic Party) took over from Anders Börd

Switzerland	2014	✓	Eveline Widmer-Schlumpf: Insider (prior Min. of Justice & Police) took over from Hans-Rudolf Merz
Trinidad and Tobago	2008		Karen Tesheira-Nunez: Outsider (lawyer) took over from Patrick Manning
Tunisia	2016	✓	Lamia Zribi: Insider (career in bureaucracy, but prior Sec of State to Min. of Development) took over from Slim Chaker

Notes: (1) Coding of insider/outsider is based on Escobar-Lemmon and Taylor-Robinson (2016: 106). “Political insiders – ministers who had previously held a cabinet post, been a vice minister, or built a career in national government.” (2) One woman finance minister who was appointed to her post at a time of increasingly high corruption is not included in this table due to lack of information for coding her career background (Clotilde Nizigama of Burundi).

8. TI CPI Measure

8.1 Discussion of Transparency International's Corruption Perception Index

The Transparency International (TI)'s Corruption Perceptions Index (CPI)—which is a composite score of 13 other indices from 12 organizations—is the “most widely known perception-based composite index.” Though, the CPI index is seen as the most comprehensive and useful of existing corruption measures (Borja 2020; Hamilton and Hammer 2018), it has also drawn criticism (Thompson and Shah 2005).

First, some scholars worry about focusing on corruption perceptions, rather than actual changes in corruption. They argue that corruption perception scores are not moved by the same factors that drive actual corruption, suggesting that the two are distinct (Donchev and Ujhelyi 2014, Petersen 2020). Treisman (2007) suggests that perceptions of corruption might be responding to other factors beyond corrupt practices. More recently, Petersen (2020) suggests that corruption scandals might only move corruption perceptions, but they do not contribute to increasing levels of actual corruption. Second, critics of the CPI note that it focuses primarily on experts', rather than citizens', assessments (Graycar and Prenzler, 2013), some of whom are not from the country in question (i.e., business leaders in developed states evaluating developing countries). Third, some work suggests that the CPI is not sensitive enough to large, but brief, corruption scandals and experiences (Gilman 2018).

Each of these criticisms is valid. Yet, for our purposes, the CPI remains the best measure of increased corruption. To begin with, the composite nature of the CPI means that it provides the most complete picture of perceived corruption, while also being highly correlated with most other measures (Beschel 2018, Charron 2016, Hamilton and Hammer 2018, Lučić, Golubović, and Džunić 2016). Given that our paper focuses on accountability and women finance ministers serving as anti-corruption signals, we also believe that it is more important to measure beliefs about corruption than corruption in and of itself. When actual corruption is measured, moreover, it often captures vote-buying or rent seeking by individual actors and agencies. Corruption perceptions capture the “general perception of corruption (everyday, related to different levels of administration, etc.)” (Belousova, Goel, and Korhonen 2016, p. 175). Likewise, we focus on expert assessments—rather than citizen respondents—because research shows substantial variation in citizens ability to accurately track corruption (Canache and Alison 2005). And, though the CPI is not especially sensitive to large, but brief, corruption scandals and experiences, we note that this suggests that we have a conservative measure of corruption perceptions that biases our results towards the null.

Finally, the CPI is the most widely used corruption measure in the literature. Below, we offer examples of other works that rely on the TI CPI.

8.2 Examples of Studies using TI CPI

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9. Discussion of Finance Ministers

9.1 Salience of the Finance Post

Generalizing from Marsh, Richards, and Smith (2000), there are four roles that ministers perform: a policy role; a political role; a managerial or executive role; and a public relations role. Our study speaks to the public relations role, which includes “overseeing departments relations with interest groups, the public, and the media” (2000: 306, Figure 1). Marsh, Richards, and Smith note that the public relations role of ministers has become increasingly important over time.

Ministers are expected to have a public-facing role in which they interact with the polity and relevant stakeholders. Likewise, chief executives are sensitive to how the make-up of their cabinets affects public opinion. As Franceschet, Annesley, and Beckwith 2017 note, “cabinets are sites of representation, and ministers are often chosen in light of informal rules about which groups must be represented in cabinet. The concept of symbolic representation draws attention to both the symbol maker (in this case, the chief executive who selects ministers) and the multiple audiences to whom the symbol is directed” (488). When assembling their cabinets, heads of government are thus sensitive not only to “experiential” and “affiliational” criteria, but also to “representational criteria”—politically relevant socio-demographic factors, including gender (Annesley, Beckwith, and Franceschet 2019).

Indeed, public opinion research suggests that citizens are responsive to the gender composition of cabinets. Barnes and Taylor-Robinson (2018) reason that “when women hold the very top posts in the cabinet citizens will be more likely to be aware of their appointment, and thus it is likely that the presence of those women in government will empower women” (230). Using cross-national data from more than 50 countries between 1981 to 2014, they show that women’s presence in high-visibility, high-prestige cabinet posts (i.e., finance, defense, and foreign affairs) is associated with more satisfaction and confidence in governments. Beyond the gender and politics scholarship, other work finds that in the United States, Latino citizens are especially attentive to high-profile Latino appointees (Baik, Lavariega-Monforti and McGlynn, 2009).

Of course, not all portfolios command equal attention. Indeed, we focus on the finance ministry because it is a highly visible post. Work by Escobar-Lemmon and Taylor-Robinson (2016), Krook and O’Brien (2012), Reynolds (1999) and others identifies the finance ministry as a high-prestige portfolio from which women have historically been excluded. Likewise, Druckman and Warwick (2005) and Druckman and Roberts (2008) identify finance—alongside foreign affairs and interior—as the most valuable portfolios after the prime ministership. In fact, their salience measure, which is based on elite surveys, consistently identifies finance as the most important cabinet portfolio, second only to the head of government post and ranking well above the deputy prime minister. They note that “the prime ministership, finance and perhaps foreign affairs are clearly distinct from other portfolios,” insofar as they “have the capacity to affect the electoral prospects of the party that holds them” (Druckman and Roberts 2008: 104).

Highly salient ministries likely received significant media attention. Focusing on cabinets more broadly, Annesley, Beckwith, and Franceschet (2019) note the “substantial media speculation about likely appointees.” And, the press “intensively” covers not only initial cabinet appointments, but also cabinet reshuffles (Indridason and Kam 2005). Because the finance ministry is highly salient, we anticipate that it receives even more coverage than other portfolios.

To this end, we searched for press coverage on cabinet ministers generally, as well as coverage of finance ministers in particular. Given our theoretical expectation that women are most likely to be used as “clean-up” symbols in presidential systems in countries with free and fair elections, we focused on the Americas, the region with the largest share of presidential systems. We counted articles in a major national newspaper during the initial honeymoon period (approximately one month) of two new presidential administrations in Costa Rica, Uruguay, and the United States. We find wide variance in coverage of ministers across posts, with low numbers of articles typical for ministers in such posts as Housing (Costa Rica, Uruguay, U.S.), Justice (Costa Rica), and Veteran’s Affairs (U.S.), and much higher coverage of posts such as Education (in Costa Rica and Uruguay) and State (U.S.).

Importantly, the finance minister receives a larger than average amount of coverage. In Uruguay’s Vasquez II administration there were 78 articles about the finance minister, compared to an average of 26 articles for all 13 ministers. In Costa Rica in the Chinchilla and Solis administrations there were 24 and 25 articles about the finance minister, compared to an average of 18 and 13 articles for all 21 ministers. In the U.S. in the Bush Jr. and Obama first terms there were 32 and 39 articles respectively about the treasury secretary, compared to an average of 21 and 11 articles for all 14 cabinet secretaries. This high level of media attention to finance ministers in new administrations suggests that the finance ministry is an especially important post for sending signals to the public.

Extending our more systematic analysis of Costa Rica, Uruguay, and the United States, we also found surveys of minister favorability ratings, or of how well known ministers are, in the following countries: Argentina, Australia, Chile, Colombia, Costa Rica, El Salvador, Estonia, France, Germany, Latvia, Mexico, Uruguay, the United Kingdom, and the U.S. These do not provide over time evidence, but suggest that the media reports on how well known cabinet members are. And, in many cases the finance minister is one of the ministers who is more likely to be known by the public (e.g. Argentina, Chile, the UK, Germany). In addition to more general media coverage of ministers, we observed that there is often reporting specifically on women being appointed to the finance ministry. On the rare occasions that women serve in the finance portfolio, they readily make headlines, and journalists tout them as “female finance ministers” (see 9.2 below).

Taken together, this suggests that citizens have ample opportunity to notice who serves in the finance ministry and, more importantly, that executives have reason to believe that cabinet appointments are widely observed. Heads of government thus likely see the potential for their ministers to serve as symbols. The fact that the media pays particular attention to women’s inclusion in these posts--and that citizens seem to be responsive to women in high-prestige positions—especially reinforces the importance of women as symbols.

9.2 Corruption and the Finance Ministry

Though women can plausibly be strategically deployed as anti-corruption signals in a number of political posts, our research focuses on the finance ministry. We concentrate our efforts on this position because the finance portfolio is still a bastion of male power. Women’s inclusion thus sends a particularly strong (and often publicly discussed) signal about the chief executive’s commitment to breaking with the status quo. Moreover, with respect to corruption perceptions, the ministry of finance is especially important, as its remit is focused on budget transparency, the effective collection of taxes, etc. This government portfolio is thus best positioned to either perpetuate or remedy corruption.

More than almost any other post, women’s inclusion in the finance ministry represents a break from the male-dominated status quo. Finance is among the four portfolios that Krook and O’Brien (2012) classify

as both “masculine” and “high prestige.” For this reason, women remain largely excluded from this powerful and coveted inner cabinet portfolio (Barnes and Taylor-Robinson 2018). Indeed, there have been far fewer women finance ministers than women foreign affairs ministers (also classified as masculine and high-prestige) or women justice ministers (typically classified as neutral and medium-prestige).

On the rare occasions that women serve in the finance portfolio, they readily make headlines, and journalists tout them as “*female* finance ministers,” as opposed to simply “finance ministers” like their male colleagues. This tendency is exemplified in recent headlines. The *BBC* writes: “Chrystia Freeland named Canada's first female finance minister.”¹ Mariam Al-Aqeel in Kuwait is referred to by the *Business Standard* as the “Gulf's first female finance minister.”² *Bloomberg* draws attention to both Vera Daves' gender and her age, “In Angola, a 35-Year-Old Woman Steps Up to Boost the Economy”³ and has given similar coverage to Peru's finance minister appointed in 2019, “Peru's 35-Year Old Finance Minister is Suddenly a Rock Star.”⁴ In India, *News 18* even felt the need to clarify that an appointee was *not* the first woman to hold the position, with the headline: “No, Nirmala Sitharaman is Not India's First Woman Finance Minister.”⁵

Women's inclusion in the small subset of high-prestige and masculine ministries—which includes the finance ministry—signals a break from the status quo. With respect to corruption perceptions, the ministry of finance, in particular, is especially important. When heads of government look to improve perceptions of corruption, they frequently turn their attention to the finance ministry to lead the charge. Transparency within the finance ministry is one of the most important steps to curbing corruption and mitigating the perception of government malfeasance. When public funds are not subject to oversight, and spending decisions are not transparent or accountable to the public, it creates opportunities for fiscal misappropriation and undermines citizens', foreign aid donors', and investors' trust in government.

A key way that governments can restore trust among both the polity and financial actors is by signaling transparency and accountability with respect to government finances and financial regulation. The finance ministry is key to achieving this goal. Indeed, in its September 2020 recommendations to the G-20 Anti-Corruption Working Group (ACWG), Transparency International called for “close coordination with the G20 finance track,” in order to “help reduce the risk of resources being lost to corruption and mismanagement.” TI recommended that the “ACWG should share with Finance Ministers concrete ideas to reduce the risk of corruption in the G20's response to the pandemic.”⁶ Likewise, it was “leaders and finance ministers for G20 countries” who committed to the G20 High-Level Principles on Beneficial Ownership Transparency, which “outline concrete actions G20 countries will take to ensure legal entities

¹ <https://www.bbc.com/news/world-us-canada-53759664> accessed 10/23/2020

² https://www.business-standard.com/article/current-affairs/new-kuwait-cabinet-appoints-gulf-s-first-female-finance-minister-119121800040_1.html accessed 10/23/2020

³ <https://www.bloomberg.com/news/articles/2019-11-06/a-35-year-old-woman-steps-up-to-revive-angola-s-economy> accessed 10/23/2020

⁴ <https://www.bloomberg.com/news/articles/2020-05-04/she-s-35-and-finance-minister-and-suddenly-a-rock-star-in-peru> accessed 10/23/2020

⁵ <https://www.news18.com/news/india/no-nirmala-sitharaman-is-not-indias-first-woman-finance-minister-to-present-union-budget-2481007.html> accessed 10/23/2020

⁶ <https://www.transparency.org/en/blog/the-g20-anti-corruption-working-group-must-turn-commitments-into-reality>

are transparent and are not being misused for illicit purposes such as money laundering, tax evasion and corruption.”⁷

Outside of the G20 countries, there are several other examples of heads of government tasking finance ministers with anti-corruption efforts. When President Obasanjo of Nigeria devoted his second term in office to curbing corruption, he assembled a team of technocrats headed by the finance minister to lead the charge (Ngozi Okonjo-Iweala 2011). When looking to clean up corruption in Cambodia the finance minister stated, “If we want to reform, we have to start at the Ministry of Finance first” (Maeda and Kimsong 2020). In Zimbabwe, when President Emmerson’s anti-corruption bodies were accused of being meaningless facades, the president looked to Finance Minister Mthuli Ncube to allocate sizable funding for anti-graft initiatives in his 2021 budget. Peru’s María Antonieta Alva, described as a “rare female finance minister in Latin America,” was recently tasked with addressing the fallout from the transnational *Lava Jato* or “Car Wash” corruption scandal, which originated in Brazil.

Indeed, appointing a woman to the finance portfolio can draw positive attention to the position and shift the narrative (at least temporarily) around the management of government finances, economic policy and financial regulation. We see examples of this in the coverage of Nigeria, where Finance Minister Okonjo-Iweala is championed as the “corruption cop;” in Paraguay where Giménez Duarte, the “first ever woman finance minister,” is touted as “a finance minister [who] wants to take down corruption;” and in Indonesia where “Sri Mulyani Indrawati, Indonesia’s first woman finance minister, describes her battle to quell corruption and, in an interview, says a few strong women in top positions can really make a difference.”

In sum, we focus on the finance ministry because the person holding this portfolio is in the best position to either perpetuate or remedy corruption via her policy decisions concerning budget transparency, the effective collection of taxes, etc. And, because the finance portfolio is often still considered to be a last bastion of maleness, women’s inclusion in the post sends a particularly strong (and often publicly commented on) signal about the chief executive’s commitment to breaking with the status quo.

⁷https://www.bmjv.de/SharedDocs/Downloads/EN/G20/Brisbane%20Anti-Corruption%20Update.pdf?__blob=publicationFile&v=1

10. Discussion of Data Temporality and Coverage

Figure 10.1: Primary Variables Over Time Variation

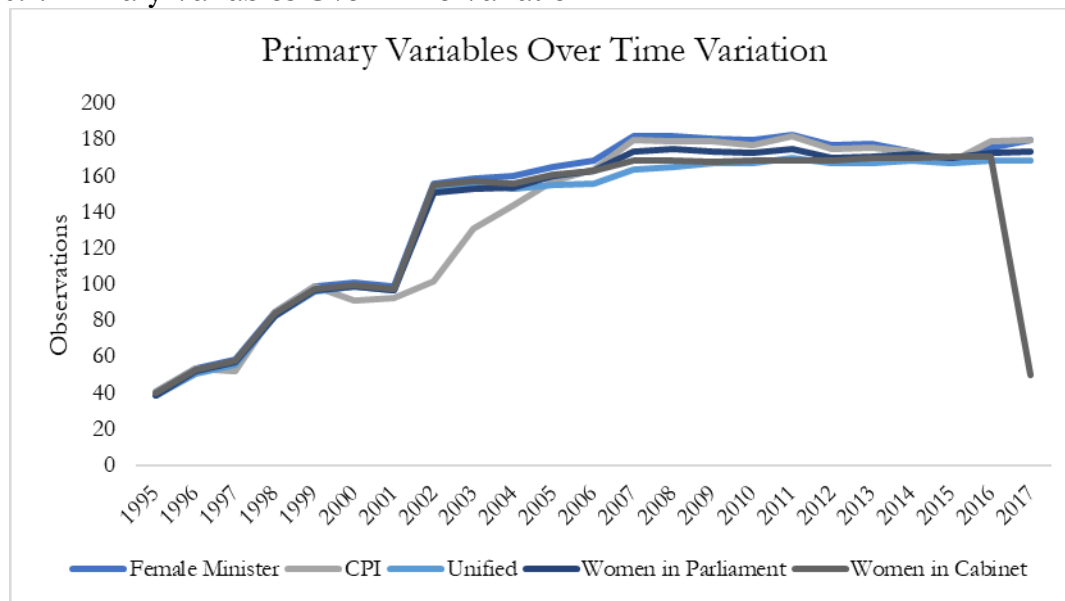


Figure 10.1 provides an overview of the number of observations (y-axis) available over time (x-axis) for the political variables in the main model. The number of observations continues to increase overtime until the number of observations for Women in Cabinet drops drastically between 2016-2017. Data coverage is most comprehensive between 2007-2016 with some year-to-year variation. Missing observations in the main analysis are typically attributed to missing data on the Women in Parliament and Unified variables. To improve the coverage of this data, we supplemented main data source Hughes et al. 2017, with data from Inter-Parliamentary Union (data that had been updated since the release of the original data set).

We also tried to expand the coverage of the Unified variable by researching political arrangements for country-years where data was otherwise missing from the Database for Political Institutions (Scartascini, Cruz, and Keefer 2018). We made minor improvements to the coverage of this variable. But, even with additional research there are a number of missing observations due to factors such as illegitimate elections, ongoing political unrest, or the dissolution of parliament (see Table 10.1).

For the sake of data transparency and replicability, we generated two tables describing missing data issues across countries over time and explaining where we used additional data sources to expand data coverage.

Table 10.1: Unified Variable Coverage Missingness and Updates

Information Regarding Missingness or Update	Country
Countries/Political units that do not have necessary data from DPI to make Unified variable	Aruba, Andorra, Antigua and Barbuda, Bermuda, Cook Islands, Dominica, Micronesia, Hong Kong, Kiribati, Saint Kitts and Nevis, Liechtenstein, Macau, Monaco, Marshall Islands, Montenegro, Nauru, Palau, San Marino, Serbia, São Tomé and Príncipe, Seychelles, Tonga, Tuvalu, Saint Vincent and the Grenadines, and Kosovo
Data Missing because Violent Conflict (Invasion, Civil War, or Coup)	Afghanistan (1996-2005); Bangladesh (2007-2008); Bosnia and Herzegovina (1992-1994); Central African Republic (2004-2005); Cote d'Ivoire (2000); Democratic Republic of the Congo (2001-2006); Comoros (1996-2000); Fiji (2001); Fiji (2007-2009); Guinea (2009-2013); The Gambia (1995-1996); Guinea-Bissau (2004, 2013-2014); Liberia (1991-1997, 2004-2005); Lesotho (1988-1993); Mali (1992); Mauritania (2006); Nigeria (1988-1999); Pakistan (2001-2002); Sierra Leone (1993-1996); Somalia (1992-2004); Chad (1988-1990); Togo (1992-1994); Thailand (1992, 2007, 2015-2017); Yemen (2016-2017)
Data Missing because Elections Cancelled or Viewed as Illegitimate	Afghanistan (2005-2017); Burundi (1988-2003); Burkina Faso (1988-1992); Bahrain (2003-2006, 2015-2017); Fiji (1988-1992, 2010-2014); Haiti (1988-1991); Lebanon (2016-2017)
Data Missing because Executive Dissolved the Legislative Body or No Legislative Elections	Bahrain (1988-1993); Brunei (1989-2006); Bhutan (1988-2007); Chile (1988-1989); Democratic Republic of the Congo (1993-1997); Comoros (2002-2004); Ghana (1988-1992); Guinea (1995-1996); Jordan (1988-1989); Jordan (2010); Maldives (1988-2009); Myanmar (1988-2010); Mauritania (1988-1992); Niger (1988-1989); Nepal (2003-2008); Qatar (1988-2006); Eswatini (1988-2008)
Data Missing because of Transition to Democracy and/or Unclear Partisan Control	Bosnia and Herzegovina (1996-2000); Eritrea (1993); Iraq (2004-2005); Lebanon (1989-1990); Mali (2003-2007); Namibia (1990)
Data Updated (may also be listed as missing above to show what was originally missing)	<p>United Arab Emirates (1988-2006) backfilled 1's since the Emir still selects 50% of the council. Originally, coverage began in 2006</p> <p>Bahrain (1988-2017) backfilled as 1's in missing years as the chamber with relative power, though less than the executive is appointed by the King.</p>

	<p>Bosnia and Herzegovina (1996-2000) coded as 0's as three regional presidents shared power, making it impossible for any of them to have a majority.</p> <p>Jordan (2010) coded as 1 for the missing 2010 as both the dissolved and newly elected governments satisfied the Unified requirement.</p> <p>Lebanon (1989-1990) coded as 0 because of the transitional government overseen by international forces. (2016-2017) coded as 1 because the 2015 government was still in power and it was Unified.</p> <p>Mali (2003-2007) coded as 0 because an independent president won the election and Rally for Mali held a majority in parliament, despite their presidential candidate losing.</p>
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Table 10.2: Women in Parliament Variable Coverage Missingness and Updates

Information Regarding Missingness or Update	Country
Countries/Political units that do not have necessary data	Aruba; Bahamas; Bermuda; Barbados; Cook Islands; Grenada; Hong Kong; Macau, Nauru; Taiwan; Kosovo
Countries updated	Egypt (1990-2003); Kazakhstan (1990-2003); Saudi Arabia (1988-2002, backfilled 0s); Soviet Union (1988-1989); Tanzania (2010), Yugoslavia (1988-2005)

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